

REMARKS

Claim 11 has been amended to recite that the (polyurea)polyurethanes produced by the claimed process are oil and petroleum resistant in accordance with the DIN EN 344 standard. Support for this amendment is found at page 9, lines 11-12 of the specification.

Claim 12 has been amended to recite that the sum of components (1) through (7) is 100 mol%.

Claim 16 has been amended to recite that the (polyurea)polyurethane is produced by the process of Claim 12 to place it in better form.

Claim 17 has been amended to recite that the (polyurea)polyurethane is produced by the process of Claim 11 to place it in better form.

The present invention relates to a process for the production of oil and petroleum-resistant (polyurea)polyurethanes, the products of this process and articles made from the products of this process.

Claims 12, 13 and 16 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The specific basis for this rejection was that it was unclear if the specified percent values sum to 100 percent.

Claim 12 has been amended to recite that the sum of (1) through (7) is 100 mol%. It is believed that this amendment removes the basis for this rejection.

Withdrawal of this rejection is therefore requested.

Claims 11-22 stand rejected under 35 U.S.C. § 112, second paragraph, on the basis that the terminology "oil and petroleum resistant" is relative in the absence of any claimed comparison or standard.

Applicants have amended Claim 11 to specifically recite that the (polyurea)polyurethanes produced by the process of the present invention are oil and petroleum resistant as determined by the standard set in DIN EN 344.

It is believed that this amendment to Claim 11 (from which Claims 12-22 depend either directly or indirectly) removes the basis for this rejection.

Withdrawal of this rejection is therefore requested.

Claims 11, 15, 17-19 and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mao (U.S. Patent 4,124,572). Applicants continue to traverse this rejection.

The Mao reference was discussed and distinguished over the claimed invention in Applicants' previous response. This discussion will not be repeated. Rather, Applicants will address the specific points raised in the Office Action of June 4, 2003.

It is stated at page 3, lines 15-16 of the Office Action that Mao discloses an index ratio that meets Applicants' claimed ratio. Specific reference is made to column 3, lines 53-58 and column 4, lines 54-55 of the reference.

At column 3, lines 53-58 of the reference, it is stated that:

"The NCO/OH ratio used to prepare the flexible thermoplastics may range from 0.95 to 1.10 with 1.00 to 1.05 being preferred."

Applicants submit that this teaching does **not** include the NCO/OH ratios of 0.7 to 0.94 and 1.06 to 1.30 within the scope of the claimed invention. Nor does Mao teach or suggest that the broad range of NCO/OH ratios of Applicants' invention would be suitable for producing the reference elastomers.

At column 4, lines 54-55 of the reference, it is stated:

"The ratio of equivalents of polyol mixture/chain extender/diisocyanate in the final polymer is 1/5/6."

Such relatively large quantity of chain extender required by Mao (i.e., 5 times the number of equivalents in the polyol mixture) is not required in Applicants' claimed invention.

Applicants would further note that Mao teaches that any of the known polyester polyols may be used in substantially larger quantities than the 3 to 30 wt% of the polyester polyol required in Applicants' invention. The reference does not teach or suggest that there would be any advantage to using the polyester polyols required in Applicants' claims in the relatively small amounts (i.e., 3-30 wt%) required in Applicants' claims. One skilled in the art would therefore need to pick and choose from the teachings of Mao in order to "arrive at" a process for producing the oil and petroleum resistant compositions of the present invention.

Mao does not therefore disclose Applicants' invention in the manner necessary to support a rejection under 35 U.S.C. § 102(b).

Withdrawal of this rejection is therefore requested.

Claims 14, 20 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mao (U.S. Patent 4,124,572). Applicants respectfully traverse this rejection.

It is noted in the Office Action that Mao is silent regarding (1) the initial combination of the polyester with the polyisocyanate (required in Claim 14); (2) production of shoe soles (required in Claim 20); and (3) production of tubing (as required in Claim 22). Nonetheless, it is stated that the subject matter of each of these claims would have been obvious to one skilled in the art.

A rejection under 35 U.S.C. § 103 must have a factual basis.

No factual basis for the conclusion of obviousness reached in the Office Action is found in the Mao reference. Nor is any other factual basis for this conclusion given.

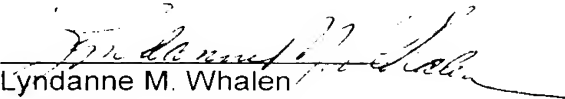
The teachings of Mao do not therefore establish a proper *prima facie* case of obviousness with respect to Applicants' invention as claimed in Claims 14, 20 and 22.

Withdrawal of this rejection is therefore requested.

In view of the above amendments and remarks, reconsideration and allowance of Claims 11-22 are respectfully requested.

Respectfully submitted,

By


Lyndanne M. Whalen
Attorney for Applicants
Reg. No. 29,457

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3843
FACSIMILE PHONE NUMBER:
(412) 777-3902
lo/WHALEN/lmw086